The human mind relies greatly on sensory reactions triggered by specific memories or particular feelings. It is able to take in all aspects of an environment and store that information, creating lasting impressions of the effects of that specific atmosphere. Sound, smell, sight, and color give atmosphere to a space, and curve the means by which the environment is perceived. Those sensory aspects allow a created atmosphere to appear real by the means of emotional loopholes in human perception. These elements enhance the final modes of deception of the human mind: science-based creations and the processes of "world building" and "conworlding" give a false sense of reality.

With this installation I explore the idea of altering human perception through the creation of an interactive space. In this room I activate the use of the five senses as well as the perception of color to mimic the same sort of deceptive nature that movie sets are able to portray. The ambiance I have chosen to create embodies the emotions of an uncomfortable space in the context of an overwhelmingly potent and chaotic setting of a theater dressing room.

Similar to the works of Jens Haaning and other interactive aesthetic artists, this space will create a sort of micro community.[1] The environment will hold an overwhelming amount of discomfort to the viewer, but a performing artist will experience a sort of familiarity that the average participant will not. Instead of holding a universal connotation, the space will embody an exclusive meaning.

A topic essential to the work of creating a convincing atmosphere, whether that environment is in a book, movie, or art piece, is the exploration of science-based design. Using scientific principles to inspire design adds an almost realistic dimension to set design by including recognizable elements from our world, therefore further convincing the viewer that the environment actually exists. Giving a scientific basis allows the natural world to be enhanced in unnatural ways, while still appearing believable to observers.

Some amazing examples of science-based set design are the virtual creations from the movie "Avatar" which uses actual, preexisting plants as a basis for each and every jungle plant in their world of Pandora. The director enlisted the help of plant physiologist, Jodie Holt, from UC Riverside to help create the flora for the movie.[2] Holt's job was to create a credible background for both the plant life itself, and the field botany of the movie. The focus of her work was to ensure that the study of plant communication as well as its inner workings maintained an adherence to the known laws of biology and physics; she contributed the idea of signal transduction, the process by which plants accept neural signals and correspond, a process currently being investigated among today's scientific community. She also later created names for the plants she had inspired, which are described in the book Avatar: An Activist Survival

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[1] Bourriaud, Nicolas. "From Relational Aesthetics - Nicolas Bourriaud (1998). *creativityandcognition.com*. N.p., n.d. Web. 23 Nov. 2011. <http://www.creativityandcognition.com/blogs/legart/wp-content/uploads/2006/07/Borriaud.pdf>.

[2] Kozlowski, Lori. "Avatar Plants | Inventing the plants of 'Avatar' - Los Angeles Times." *Featured Articles From The Los Angeles Times*. N.p., n.d. Web. 4 Dec. 2011. <http://articles.latimes.com/2010/jan/02/science/la-sci-avatar-q-and-a2-2010jan02>.

Guide. Holt's work for the book included the taxonomy, description, and general information about the ecology and ethno botany of each plant.

The architects Yannick Gourvil and Cécile Leroux from the French firm Collectif Et Alors have created a set of plans of what they think that Paris will look like in 2100.[3] To create their visions they took into consideration social, economic, and environmental factors of our modern day society, and re-imagined what our future might look like architecturally, thinking in terms of one our world's most classically beautiful cities. The scientific elements such as those included in both the "Avatar" and the "Paris 2100" designs give a relatable sense to the viewers, due to science's dependability of being known and accepted as fact.

Another term for the process of deceiving the viewer into accepting a created space as reality is "conworlding" or "world building." These practices are used in the creation of literature and films, and describe the methods by which authors are able to construct a sense of location on a large scale. Creating a believable world requires the construction of a new social existence, and all that comes with it: religion, culture, language, and environment. Creating the details of everyday life, even if it is dissimilar to our own world, make that environment believable. The small details, whether they are physical elements or social practices that create a connection to how our world works, give synthetic worlds a sensation of authenticity for the viewer.

Whereas synthetic, and often times fictional, elements can convince the viewers of true existence, smell and hearing induce a more personal experience to a space that results in a more individual reaction. These two senses are often associated with memory, specifically the ability to recall a certain moment, or environment. A hundred people could be introduced to the same smell and conjure up a hundred different memories, each with its own sentimental attachment. With the introduction of scent and sound an element of emotional response comes into play.

It is said that smell is the strongest of the senses since it is truly more of a long-term memory sense than that of sight or hearing.[4] It is 10,000 times more sensitive than any other sense, and travels directly to the brain rather than passing through the body's neurons and spinal cord. That strength is why anyone could place a certain smell, such as soap, back to his or her grandmother's house faster than that person could tell you what her couch looked like. After initially experiencing this sensory trace back to a specific place, that person would then experience a string of memories all related to that environment, originating from a simple, recognizable smell.

Hearing, while short term, is more of an instinctual sense. It too can provide emotional responses, such as the recognition of a favorite song or a police siren; however, evolutionarily it is mainly used to recognize danger; it is in human nature to use this process of "evolutionary

[3] Davies, Alex. "Architects Imagine a Utopian Paris in 2100, a Little Warmer and a Whole Lot Greener: TreeHugger." *TreeHugger*. N.p., 8 Apr. 2011. Web. 23 Nov. 2011. <http://www.treehugger.com/sustainable-product-design/architects-imagine-a-utopian-paris-in-2100-a-little-warmer-and-a-whole-lot-greener.html>.

[4] Rodriguez-Gil, Gloria. "The Sense of Smell: A Powerful Sense." *Welcome to TSBVI!*. N.p., n.d. Web. 24 Nov. 2011. <http://www.tsbvi.edu/seehear/summer05 smell.html>.

survival advantage."[5] We are trained to focus on the thing that most puts us in danger, therefore ignoring all the other details. These memories that are created then last for only short periods of time and are generally more "semantic," or impersonal, relating more to facts than to personal experiences.[6]

Where smell and hearing affect the personal or impersonal impact of a setting, the physical space, color, and overall visual experience of that place provide the mood. Color is able to deceive the eye so effectively that it is able to influence human emotions.[7] When building sets, the hidden meaning of color must be considered carefully. For example, in the making of the virtual world of "Avatar," the creators had originally wanted the jungle to have a blue tint, but soon found they were limited by the human perception of color; a blue forest would give the illusion of lifelessness, contrary to humans' interpretation of the color green.[8] Space and sight reinforce the mood created by color by limiting or stretching the physical dimensions of a room, and utilizing props that induce human emotion, therefore allowing a specific ambiance to be created.

The space I have created engages the viewer in a manner that activates every sense and mode of perception, thus giving the created environment the feel of realism. The smells of exaggerated beauty and hard work blend with the lights of the show itself to evoke memories and experiences that create a personal element rather than a universal recognition. It is an experiential space rather than something meant to be just viewed, and thus hopefully will create a unique response in each and every viewer.

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[5] "Short-Term Memory and Working Memory - Types of Memory - The Human Memory." *The Human Memory - what it is, how it works and how it can go wrong*. N.p., n.d. Web. 24 Nov. 2011. <http://www.human-memory.net/types_short.html>.

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[7] Albers, Josef. *Interaction of color*. New Haven: Yale University Press, 1971. Print.

[8] Fitzpatrick, Lisa. *The art of Avatar: James Cameron's epic adventure*. New York: Abrams, 2009. Print.

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